

**"Broad Band Long Term Monitoring of X-Ray Bursters"**

**Final Report**

**Prepared by  
Shuang Nan Zhang, Principal Investigator  
Department of Physics**

**For the period of February 1, 1999 – January 31, 2001**

**University of Alabama in Huntsville  
Huntsville, AL 35899  
Phone: 256-824-2864**

**NAG5-8440**

## **Final Report on NAG5-8440: Broadband Long Term Monitoring of X-Ray Bursters**

**We have analysed the BATSE long term monitoring data of X-ray bursters. We generated the long-term light-curves of several X-ray bursters and studied their spectral evolution and compared them with black hole X-ray binaries. Our research results have been published in the following papers:**

**"The Burst and Transient Source Experiment Earth Occultation Technique", Harmon, B. A., Fishman, G. J., Wilson, C. A., Paciesas, W. S., Zhang, S. N., Finger, M. H., Koshut, T. M., McCollough, M. L., Robinson, C. R., & Rubin, B. C., Astrophysical Journal Supplement Series, 138, 183, 1/2002**

**"The BATSE Earth Occultation Catalog of Low Energy Gamma-Ray Sources", Harmon, B. A., Wilson-Hodge, C. A., Fishman, G. J., Paciesas, W. S., Zhang, S. N., Finger, M. H., Connaughton, V., Koshut, T. M., Henze, W., McCollough, M. L., Sahi, M., Peterson, B., Grindlay, J., Barret, D., & Shrader, C. R., American Astronomical Society Meeting, 199, 12/2001**